

Indiana Department of Environmental Management

We make Indiana a cleaner, healthier place to live.

Frank O'Bannon Governor

Lori F. Kaplan
Commissioner

July 10, 2003

100 North Senate Avenue P. O. Box 6015 Indianapolis, Indiana 46206-6015 (317) 232-8603 (800) 451-6027 www.IN.gov/idem

TO: Interested Parties / Applicant

RE: The Dallas Group of America, Inc. 019-16580-00050

FROM: Paul Dubenetzky

Chief, Permits Branch Office of Air Quality

Notice of Decision: Approval - Effective Immediately

Please be advised that on behalf of the Commissioner of the Department of Environmental Management, I have issued a decision regarding the enclosed matter. Pursuant to IC 13-15-5-3, this permit is effective immediately, unless a petition for stay of effectiveness is filed and granted according to IC 13-15-6-3, and may be revoked or modified in accordance with the provisions of IC 13-15-7-1.

If you wish to challenge this decision, IC 4-21.5-3 and IC 13-15-6-1 require that you file a petition for administrative review. This petition may include a request for stay of effectiveness and must be submitted to the Office of Environmental Adjudication, ISTA Building, 150 W. Market Street, Suite 618, Indianapolis, IN 46204, **within (18) eighteen days of the mailing of this notice**. The filing of a petition for administrative review is complete on the earliest of the following dates that apply to the filing:

- (1) the date the document is delivered to the Office of Environmental Adjudication (OEA);
- the date of the postmark on the envelope containing the document, if the document is mailed to OEA by U.S. mail; or
- (3) the date on which the document is deposited with a private carrier, as shown by receipt issued by the carrier, if the document is sent to the OEA by private carrier.

The petition must include facts demonstrating that you are either the applicant, a person aggrieved or adversely affected by the decision or otherwise entitled to review by law. Please identify the permit, decision, or other order for which you seek review by permit number, name of the applicant, location, date of this notice and all of the following:

- (1) the name and address of the person making the request;
- (2) the interest of the person making the request;
- (3) identification of any persons represented by the person making the request;
- (4) the reasons, with particularity, for the request;
- (5) the issues, with particularity, proposed for consideration at any hearing; and
- identification of the terms and conditions which, in the judgment of the person making the request, would be appropriate in the case in question to satisfy the requirements of the law governing documents of the type issued by the Commissioner.

If you have technical questions regarding the enclosed documents, please contact the Office of Air Quality, Permits Branch at (317) 233-0178. Callers from within Indiana may call toll-free at 1-800-451-6027, ext. 3-0178.

Enclosure

FNPER.wpd 8/21/02

MINOR SOURCE OPERATING PERMIT OFFICE OF AIR QUALITY

The Dallas Group of America, Inc. 1402 Fabricon Boulevard Jeffersonville, Indiana 47130

(herein known as the Permittee) is hereby authorized to construct and operate subject to the conditions contained herein, the emission units described in Section A (Source Summary) of this permit.

This permit is issued to the above mentioned company under the provisions of 326 IAC 2-1.1, 326 IAC 2-6.1 and 40 CFR 52.780, with conditions listed on the attached pages.

Operation Permit No.: MSOP 019-16580-00050	
Issued by: Original Signed by Paul Dubenetzky Paul Dubenetzky, Branch Chief Office of Air Quality	Issuance Date: July 10, 2003 Expiration Date: July 10, 2008

TABLE OF CONTENTS

Α	SOL	IRCE	SHIM	MARY
_	301	INCE	JUIV	IIVIANI

- A.1 General Information [326 IAC 2-5.1-3(c)] [326 IAC 2-6.1-4(a)]
- A.2 Emission Units and Pollution Control Equipment Summary

B GENERAL CONDITIONS

- B.1 Permit No Defense [IC 13]
- B.2 Definitions
- B.3 Effective Date of the Permit [IC 13-15-5-3]
- B.4 Revocation of Permits [326 IAC 2-1.1-9(5)]
- B.5 Permit Term and Renewal [326 IAC 2-6.1-7(a)][326 IAC 2-1.1-9.5]
- B.6 Modification to Permit [326 IAC 2]
- B.7 Minor Source Operating Permit [326 IAC 2-6.1]
- B.8 Annual Notification
- B.9 Preventive Maintenance Plan
- B.10 Permit Revision
- B.11 Inspection and Entry
- B.12 Transfer of Ownership or Operation
- B.13 Annual Fee Payment [326 IAC 2-1.1-7]

C SOURCE OPERATION CONDITIONS

- C.1 Particulate Emission Limitation
- C.2 Permit Revocation [326 IAC 2-1-9]
- C.3 Opacity [326 IAC 5-1]
- C.4 Fugitive Dust Emissions [326 IAC 6-4]
- C.5 Asbestos Abatement Projects [326 IAC 14-10][326 IAC 18][40 CFR 61, Subpart M]
- C.6 Performance Testing [326 IAC 3-6]
- C.7 Compliance Requirements [326 IAC 2-1.1-11]
- C.8 Compliance Monitoring [326 IAC 2-1.1-11]
- C.9 Monitoring Methods [326 IAC 3]
- C.10 Malfunctions Report [326 IAC 1-6-2]
- C.11 Annual Emission Statement [326 IAC 2-6]
- C.12 General Record Keeping Requirements [326 IAC 2-6.1-2]
- C.13 General Reporting Requirements [326 IAC 2-1.1-11] [326 IAC 2-6.1-2] [IC 13-14-1-13]

D.1 FACILITY OPERATION CONDITIONS - Magnesol Manufacturing Operation

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.1.1 Particulate Matter (PM)

Annual Notification Malfunction Report

SECTION A SOURCE SUMMARY

This permit is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ). The information describing the source contained in conditions A.1 through A.3 is descriptive information and does not constitute enforceable conditions. However, the Permittee should be aware that a physical change or a change in the method of operation that may render this descriptive information obsolete or inaccurate may trigger requirements for the Permittee to obtain additional permits or seek modification of this permit pursuant to 326 IAC 2, or change other applicable requirements presented in the permit application.

A.1 General Information [326 IAC 2-5.1-3(c)] [326 IAC 2-6.1-4(a)]

The Permittee owns and operates a synthetic magnesium silicate (Magnesol) manufacturing operation.

Authorized Individual: David Cousins

Source Address: 1402 Fabricon Boulevard, Jeffersonville, Indiana 47130 Mailing Address: 1402 Fabricon Boulevard, Jeffersonville, Indiana 47130

General Source Phone: (812) 283-6675

SIC Code: 2819 County Location: Clark

Source Location Status: Maintenance attainment for ozone, attainment for all other criteria

pollutants

Source Status: Minor Source under PSD Rules;

Minor Source under Section 112 of the Clean Air Act

A.2 Emissions Units and Pollution Control Equipment Summary

This stationary source is approved to construct and operate the following emissions units and pollution control devices:

- (a) One (1) 7.5 MMBtu/hr natural gas fired spray dryer, identified as Dryer 1, with particulate emissions controlled by the PC-72 baghouse, with emissions exhausted through Stack PC-72.
- (b) One (1) 15 MMBtu/hr natural gas fired spray dryer, identified as Dryer 2, with particulate emissions controlled by the PC-420 baghouse, with emissions exhausted through Stack PC-420.
- (c) One (1) 40 MMBtu/hr natural gas fired spray dryer, identified as Dryer 3, with particulate emissions controlled by one (1) baghouse, identified as PC-960, with emissions exhausted through Stack PC-960,
- (d) One (1) 0.25 MMBtu/hr natural gas fired spray dryer, identified as Pilot Dryer, with particulate emissions controlled by the PC-9 baghouse, with emissions exhausted through Stack PC-9,
- (e) One (1) spray dryer product collection system consisting of two (2) baghouses identified as PC-144 and PC-80,
- (f) Two (2) product classifiers equipped with two (2) product classifier baghouses, identified as PC-30 and PC-80,
- (g) One (1) pneumatic product conveyor system with particulate emissions controlled by two baghouses, identified as PC-16 and PC-4,

- (h) One (1) pneumatic raw material recovery and conveyor system, with emissions collected by one of three baghouses; PC-4, PC-16, or PC-144,
- (i) One (1) 4.185 MMBtu/hr natural gas fired boiler, with emissions exhausted through the boiler stack,
- (j) One (1) 3.8 MMBtu/hr natural gas fired water heater, and
- (k) One (1) general nuisance dust collection baghouse, identified as PC-19.

SECTION B GENERAL CONDITIONS

THIS SECTION OF THE PERMIT IS BEING ISSUED UNDER THE PROVISIONS OF 326 IAC 2-1.1 AND 40 CFR 52.780, WITH CONDITIONS LISTED BELOW.

B.1 Permit No Defense [IC 13]

This permit to construct does not relieve the Permittee of the responsibility to comply with the provisions of the Indiana Environmental Management Law (IC 13-11 through 13-20; 13-22 through 13-25; and 13-30), the Air Pollution Control Law (IC 13-17) and the rules promulgated thereunder, as well as other applicable local, state, and federal requirements.

B.2 Definitions

Terms in this permit shall have the definition assigned to such terms in the referenced regulation. In the absence of definitions in the referenced regulation, the applicable definitions found in the statutes or regulations IC 13-11, 326 IAC 1-2, and 326 IAC 2-1.1-1 shall prevail.

B.3 Effective Date of the Permit [IC13-15-5-3]

Pursuant to IC 13-15-5-3, this permit becomes effective upon its issuance.

B.4 Revocation of Permits [326 IAC 2-1.1-9(5)]

Pursuant to 326 IAC 2-1.1-9(5)(Revocation of Permits), the Commissioner may revoke this permit if construction is not commenced within eighteen (18) months after receipt of this approval or if construction is suspended for a continuous period of one (1) year or more.

B.5 Permit Term and Renewal [326 IAC 2-6.1-7(a)][326 IAC 2-1.1-9.5]

This permit is issued for a fixed term of five (5) years from the issuance date of this permit, as determined in accordance with IC 4-21.5-3-5(f) and IC 13-15-5-3. Subsequent revisions of this permit do not affect the expiration date.

The Permittee shall apply for an operation permit renewal at least ninety (90) days prior to the expiration date. If a timely and sufficient permit application for a renewal has been made, this permit shall not expire and all terms and conditions shall continue in effect until the renewal permit has been issued or denied.

B.6 Modification to Permit [326 IAC 2]

Notwithstanding the Section B condition entitled "Minor Source Operating Permit", all requirements and conditions of this construction permit shall remain in effect unless modified in a manner consistent with procedures established for modifications of construction permits pursuant to 326 IAC 2 (Permit Review Rules).

B.7 Minor Source Operating Permit [326 IAC 2-6.1]

This document shall also become a minor source operating permit pursuant to 326 IAC 2-6.1 when, prior to start of operation, the following requirements are met:

- (a) The attached Affidavit of Construction shall be submitted to the Office of Air Quality (OAQ), Permit Administration & Development Section.
 - (1) If the Affidavit of Construction verifies that the facilities covered in this Construction Permit were constructed as proposed in the application, then the facilities may begin operating on the date the Affidavit of Construction is postmarked or hand delivered to IDEM.
 - (2) If actual construction of the emission units differs from the construction proposed in the application, the source may not begin operation until the permit has been revised pursuant to 326 IAC 2-6.1-6 and an Operation Permit Validation Letter is issued.

- (b) If construction is completed in phases; i.e., the entire construction is not done continuously, a separate affidavit must be submitted for each phase of construction. Any permit conditions associated with operation start up dates such as stack testing for New Source Performance Standards (NSPS) shall be applicable to each individual phase.
- (c) Upon receipt of the Operation Permit Validation Letter from the Chief of the Permit Administration & Development Section, the Permittee shall attach it to this document.
- (d) The operation permit will be subject to annual operating permit fees pursuant to 326 IAC 2-1.1-7(Fees).

B.8 Annual Notification [326 IAC 2-6.1-5(a)(5)]

- (a) Annual notification shall be submitted to the Office of Air Quality stating whether or not the source is in operation and in compliance with the terms and conditions contained in this permit.
- (b) Noncompliance with any condition must be specifically identified. If there are any permit conditions or requirements for which the source is not in compliance at any time during the year, the Permittee must provide a narrative description of how the source did or will achieve compliance and the date compliance was, or will be, achieved. The notification must be signed by an authorized individual.
- (c) The annual notice shall cover the time period from January 1 to December 31 of the previous year, and shall be submitted in the format attached no later than March 1 of each year to:

Compliance Branch, Office of Air Quality Indiana Department of Environmental Management 100 North Senate Avenue, P.O. Box 6015 Indianapolis, IN 46206-6015

(d) The notification shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, on or before the date it is due.

B.9 Preventive Maintenance Plan [326 IAC 1-6-3]

- (a) If required by specific condition(s) in Section D of this permit, the Permittee shall prepare and maintain Preventive Maintenance Plans (PMPs) within ninety (90) days after issuance of this permit, including the following information on each emissions unit:
 - Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices:
 - (2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions; and
 - (3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.

If, due to circumstances beyond the Permittee's control, the PMPs cannot be prepared and maintained within the above time frame, the Permittee may extend the date an additional ninety (90) days provided the Permittee notifies:

Indiana Department of Environmental Management Compliance Branch, Office of Air Quality 100 North Senate Avenue, P. O. Box 6015 Indianapolis, Indiana 46206-6015

The PMP extension notification does not require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

- (b) The Permittee shall implement the PMPs as necessary to ensure that failure to implement a PMP does not cause or contribute to a violation of any limitation on emissions or potential to emit.
- (c) A copy of the PMP's shall be submitted to IDEM, OAQ, upon request and within a reasonable time, and shall be subject to review and approval by IDEM, OAQ. IDEM, OAQ, may require the Permittee to revise its PMP whenever lack of proper maintenance causes or contributes to any violation. The PMP does not require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (d) Records of preventive maintenance shall be retained for a period of at least five (5) years. These records shall be kept at the source location for a minimum of three (3) years. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner makes a request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.

B.10 Permit Revision [326 IAC 2-5.1-3(e)(3)] [326 IAC 2-6.1-6]

- (a) Permit revisions are governed by the requirements of 326 IAC 2-6.1-6.
- (b) Any application requesting an amendment or modification of this permit shall be submitted to:

Indiana Department of Environmental Management Permits Branch, Office of Air Quality 100 North Senate Avenue, P.O. Box 6015 Indianapolis, Indiana 46206-6015

Any such application shall be certified by an "authorized individual" as defined by 326 IAC 2-1.1-1.

(c) The Permittee shall notify the OAQ within thirty (30) calendar days of implementing a notice-only change. [326 IAC 2-6.1-6(d)]

B.11 Inspection and Entry [326 IAC 2-5.1-3(e)(4)(B)] [326 IAC 2-6.1-5(a)(4)][IC 13-14-2-2]

Upon presentation of proper identification cards, credentials, and other documents as may be required by law, and subject to the Permittee's right under all applicable laws and regulations to assert that the information collected by the agency is confidential and entitled to be treated as such, the Permittee shall allow IDEM, OAQ, U.S. EPA, or an authorized representative to perform the following:

- Enter upon the Permittee's premises where a permitted source is located, or emissions related activity is conducted, or where records must be kept under the conditions of this permit;
- (b) Have access to and copy, at reasonable times, any records that must be kept under this title or the conditions of this permit or any operating permit revisions;
- (c) Inspect, at reasonable times, any processes, emissions units (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit or any operating permit revisions;
- (d) Sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with this permit or applicable requirements; and
- (e) Utilize any photographic, recording, testing, monitoring, or other equipment for the purpose of assuring compliance with this permit or applicable requirements.

B.12 Transfer of Ownership or Operation [326 IAC 2-6.1-6(d)(3)]

Pursuant to [326 IAC 2-6.1-6(d)(3)]:

- (a) In the event that ownership of this source is changed, the Permittee shall notify IDEM, OAQ, Permits Branch, within thirty (30) days of the change.
- (b) The written notification shall be sufficient to transfer the permit to the new owner by an notice-only change pursuant to 326 IAC 2-6.1-6(d)(3).
- (c) IDEM, OAQ, shall issue a revised permit.

The notification which shall be submitted by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1.

B.13 Annual Fee Payment [326 IAC 2-1.1-7]

- (a) The Permittee shall pay annual fees to IDEM, OAQ within thirty (30) calendar days of receipt of a billing.
- (b) The Permittee may call the following telephone numbers: 1-800-451-6027 or 317-233-4230 (ask for OAQ, I/M & Billing Section), to determine the appropriate permit fee.

SECTION C

SOURCE OPERATION CONDITIONS

Entire Source

- C.1 Particulate Emission Limitations For Processes with Process Weight Rates Less Than One Hundred (100) pounds per hour [40 CFR 52 Subpart P][326 IAC 6-3-2]
 - (a) Pursuant to 40 CFR 52 Subpart P, the allowable particulate matter emissions rate from any process not already regulated by 326 IAC 6-1 or any New Source Performance Standard, and which has a maximum process weight rate less than 100 pounds per hour shall not exceed 0.551 pounds per hour.
 - (b) Pursuant to 326 IAC 6-3-2(e)(2), the allowable particulate emissions rate from any process not exempt under 326 IAC 6-3-1(b) or (c) which has a maximum process weight rate less than 100 pounds per hour and the methods in 326 IAC 6-3-2(b) through (d) do not apply shall not exceed 0.551 pounds per hour.

C.2 Permit Revocation [326 IAC 2-1.1-9]

Pursuant to 326 IAC 2-1.1-9 (Revocation of Permits), this permit to construct and operate may be revoked for any of the following causes:

- (a) Violation of any conditions of this permit.
- (b) Failure to disclose all the relevant facts, or misrepresentation in obtaining this permit.
- (c) Changes in regulatory requirements that mandate either a temporary or permanent reduction of discharge of contaminants. However, the amendment of appropriate sections of this permit shall not require revocation of this permit.
- (d) Noncompliance with orders issued pursuant to 326 IAC 1-5 (Episode Alert Levels) to reduce emissions during an air pollution episode.
- (e) For any cause which establishes in the judgment of IDEM, the fact that continuance of this permit is not consistent with purposes of this article.

C.3 Opacity [326 IAC 5-1]

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall meet the following, unless otherwise stated in this permit:

- (a) Opacity shall not exceed an average of thirty percent (30%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

C.4 Fugitive Dust Emissions [326 IAC 6-4]

The Permittee shall not allow fugitive dust to escape beyond the property line or boundaries of the property, right-of-way, or easement on which the source is located, in a manner that would violate 326 IAC 6-4 (Fugitive Dust Emissions).

C.5 Asbestos Abatement Projects [326 IAC 14-10] [326 IAC 18] [40 CFR 61, Subpart M]

- (a) Notification requirements apply to each owner or operator. If the combined amount of regulated asbestos containing material (RACM) to be stripped, removed or disturbed is at least 260 linear feet on pipes or 160 square feet on other facility components, or at least thirty-five (35) cubic feet on all facility components, then the notification requirements of 326 IAC 14-10-3 are mandatory. All demolition projects require notification whether or not asbestos is present.
- (b) The Permittee shall ensure that a written notification is sent on a form provided by the Commissioner at least ten (10) working days before asbestos stripping or removal work or before demolition begins, per 326 IAC 14-10-3, and shall update such notice as necessary, including, but not limited to the following:
 - (1) When the amount of affected asbestos containing material increases or decreases by at least twenty percent (20%); or
 - (2) If there is a change in the following:
 - (A) Asbestos removal or demolition start date;
 - (B) Removal or demolition contractor; or
 - (C) Waste disposal site.
- (c) The Permittee shall ensure that the notice is postmarked or delivered according to the guidelines set forth in 326 IAC 14-10-3(2).
- (d) The notice to be submitted shall include the information enumerated in 326 IAC 14-10-3(3).

All required notifications shall be submitted to:

Indiana Department of Environmental Management Asbestos Section, Office of Air Quality 100 North Senate Avenue, P.O. Box 6015 Indianapolis, Indiana 46206-6015

The notice shall include a signed certification from the owner or operator that the information provided in this notification is correct and that only Indiana licensed workers and project supervisors will be used to implement the asbestos removal project. The notifications do not require a certification by an "authorized individual" as defined by 326 IAC 2-7-1(34).

(e) Procedures for Asbestos Emission Control The Permittee shall comply with the applicable emission control procedures in 326 IAC 14-10-4 and 40 CFR 61.145(c). Per 326 IAC 14-10-1, emission control requirements are applicable for any removal or disturbance of RACM greater than three (3) linear feet on pipes or three (3) square feet on any other facility components or a total of at least 0.75 cubic feet on all facility components.

Indiana Accredited Asbestos Inspector
The Permittee shall comply with 326 IAC 14-10-1(a) that requires the owner or operator, prior to a renovation/demolition, to use an Indiana Accredited Asbestos Inspector to thoroughly inspect the affected portion of the facility for the presence of asbestos. The requirement that the inspector be accredited, pursuant to the provisions of 40 CFR 61, Subpart M, is federally enforceable.

Testing Requirements

C.6 Performance Testing [326 IAC 3-6]

(a) Compliance testing on new emissions units shall be conducted within 60 days after achieving maximum production rate, but no later than 180 days after initial start-up, if specified in Section D of this approval. All testing shall be performed according to the provisions of 326 IAC 3-6 (Source Sampling Procedures), except as provided elsewhere in this permit, utilizing any applicable procedures and analysis methods specified in 40 CFR 51, 40 CFR 60, 40 CFR 61, 40 CFR 63, 40 CFR 75, or other procedures approved by IDEM, OAQ.

A test protocol, except as provided elsewhere in this permit, shall be submitted to:

Indiana Department of Environmental Management Compliance Data Section, Office of Air Quality 100 North Senate Avenue, P. O. Box 6015 Indianapolis, Indiana 46206-6015

no later than thirty-five (35) days prior to the intended test date.

- (b) The Permittee shall notify IDEM, OAQ of the actual test date at least fourteen (14 days) prior to the actual date.
- (c) Pursuant to 326 IAC 3-6-4(b), all test reports must be received by IDEM, OAQ not later than forty-five (45) days after the completion of the testing. An extension may be granted by the IDEM, OAQ, if the source submits to IDEM, OAQ, a reasonable written explanation not later than five (5) days prior to the end of the initial forty-five (45) day period.

Compliance Requirements [326 IAC 2-1.1-11]

C.7 Compliance Requirements [326 IAC 2-1.1-11]

The commissioner may require stack testing, monitoring, or reporting at any time to assure compliance with all applicable requirements by issuing an order under 326 IAC 2-1.1-11. Any monitoring or testing shall be performed in accordance with 326 IAC 3 or other methods approved by the commissioner or the U.S. EPA.

Compliance Monitoring Requirements

C.8 Compliance Monitoring [326 IAC 2-1.1-11]

Compliance with applicable requirements shall be documented as required by this permit. The Permittee shall be responsible for installing any necessary equipment and initiating any required monitoring related to that equipment. All monitoring and record keeping requirements not already legally required shall be implemented when operation begins.

C.9 Monitoring Methods [326 IAC 3][40 CFR 60][40 CFR 63]

Any monitoring or testing required by Section D of this permit shall be performed according to the provisions of 326 IAC 3, 40 CFR 60, Appendix A, 40 CFR 60, Appendix B, 40 CFR 63, or other approved methods as specified in this permit.

Record Keeping and Reporting Requirements

C.10 Malfunctions Report [326 IAC 1-6-2]

Pursuant to 326 IAC 1-6-2 (Records; Notice of Malfunction):

- (a) A record of all malfunctions, including startups or shutdowns of any facility or emission control equipment, which result in violations of applicable air pollution control regulations or applicable emission limitations shall be kept and retained for a period of three (3) years and shall be made available to the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ) or appointed representative upon request.
- (b) When a malfunction of any facility or emission control equipment occurs which lasts more than one (1) hour, said condition shall be reported to OAQ, using the Malfunction Report Forms (2 pages). Notification shall be made by telephone or facsimile, as soon as practicable, but in no event later than four (4) daytime business hours after the beginning of said occurrence.
- (c) Failure to report a malfunction of any emission control equipment shall constitute a violation of 326 IAC 1-6, and any other applicable rules. Information of the scope and expected duration of the malfunction shall be provided, including the items specified in 326 IAC 1-6-2(a)(1) through (6).
- (d) Malfunction is defined as any sudden, unavoidable failure of any air pollution control equipment, process, or combustion or process equipment to operate in a normal and usual manner. [326 IAC 1-2-39]

C.11 Emission Statement [326 IAC 2-6]

- (a) The Permittee shall submit an annual emission statement certified pursuant to the requirements of 326 IAC 2-6, that must be received by April 15 of each year and must comply with the minimum requirements specified in 326 IAC 2-6-4. The annual emission statement shall meet the following requirements:
 - (1) Indicate estimated actual emissions of criteria pollutants from the source, in compliance with 326 IAC 2-6 (Emission Reporting);
 - (2) Indicate estimated actual emissions of other regulated pollutants (as defined by 326 IAC 2-7-1) from the source, for purposes of Part 70 fee assessment.
- (b) The annual emission statement covers the twelve (12) consecutive month time period starting December 1 and ending November 30. The annual emission statement must be submitted to:

Indiana Department of Environmental Management Technical Support and Modeling Section, Office of Air Quality 100 North Senate Avenue, P. O. Box 6015 Indianapolis, Indiana 46206-6015

(c) The annual emission statement required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, on or before the date it is due.

The submittal by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1.

C.12 General Record Keeping Requirements [326 IAC 2-6.1-5]

- (a) Records of all required data, reports and support information shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. These records shall be kept at the source location for a minimum of three (3) years. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner makes a request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.
- (b) Unless otherwise specified in this permit, all record keeping requirements not already legally required shall be implemented when operation begins.

C.13 General Reporting Requirements [326 IAC 2-1.1-11] [326 IAC 2-6.1-2] [IC 13-14-1-13]

(a) Reports required by conditions in Section D of this permit shall be submitted to:

Indiana Department of Environmental Management Compliance Data Section, Office of Air Quality 100 North Senate Avenue, P. O. Box 6015 Indianapolis, Indiana 46206-6015

- (b) Unless otherwise specified in this permit, any notice, report, or other submission required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, on or before the date it is due.
- (c) Unless otherwise specified in this permit, any report required in Section D of this permit shall be submitted within thirty (30) days of the end of the reporting period. The report(s) does(do) not require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (d) The first report shall cover the period commencing on the date of issuance of this permit and ending on the last day of the reporting period. Reporting periods are based on calendar years.

SECTION D.1 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]:

- (a) One (1) 7.5 MMBtu/hr natural gas fired spray dryer, identified as Dryer 1, with particulate emissions controlled by the PC-72 baghouse, with emissions exhausted through Stack PC-72.
- (b) One (1) 15 MMBtu/hr natural gas fired spray dryer, identified as Dryer 2, with particulate emissions controlled by the PC-420 baghouse, with emissions exhausted through Stack PC-420,
- (c) One (1) 40 MMBtu/hr natural gas fired spray dryer, identified as Dryer 3, with particulate emissions controlled by one (1) baghouse, identified as PC-960, with emissions exhausted through Stack PC-960.
- (d) One (1) 0.25 MMBtu/hr natural gas fired spray dryer, identified as Pilot Dryer, with particulate emissions controlled by the PC-9 baghouse, with emissions exhausted through Stack PC-9,
- (e) One (1) spray dryer product collection system consisting of two (2) baghouses identified as PC-144 and PC-80,
- (f) Two (2) product classifiers equipped with two (2) product classifier baghouses, identified as PC-30 and PC-80.
- (g) One (1) pneumatic product conveyor system with particulate emissions controlled by two baghouses, identified as PC-16 and PC-4,
- (h) One (1) pneumatic raw material recovery and conveyor system, with emissions collected by one of three baghouses; PC-4, PC-16, or PC-144,
- (i) One (1) 4.185 MMBtu/hr natural gas fired boiler, with emissions exhausted through the boiler stack,
- (j) One (1) 3.8 MMBtu/hr natural gas fired water heater, and
- (k) One (1) general nuisance dust collection baghouse, identified as PC-19.

Emission Limitations and Standards

D.1.1 Particulate [326 IAC 6-3-2(e)]

Pursuant to 326 IAC 6-3-2, the particulate matter (PM) emissions from baghouses PC-420, PC-144, PC-80, PC-72, PC-30, PC-19, PC-16, PC-9, PC-4, and PC-960, each, shall be limited to 0.87 lb/hr.

Page 15 of 17 MSOP 019-16580-00050

The Dallas Group of America, Inc. Jeffersonville, Indiana Permit Reviewer: SDF

Company Name: The Dallas Group of America, Inc.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT OFFICE OF AIR QUALITY COMPLIANCE BRANCH

MINOR SOURCE OPERATING PERMIT ANNUAL NOTIFICATION

This form should be used to comply with the notification requirements under 326 IAC 2-6.1-5(a)(5).

Address:	1402 Fabricon Boulevard, Jeffersonville, Indiana 47130
Phone #:	(812) 283 - 6675
MSOP #:	019 - 16580-00050
I hereby certify t	that The Dallas Group of America, Inc. is 9 still in operation. 9 no longer in operation.
I hereby certify t	that The Dallas Group of America, Inc. is
•	e with the requirements of MSOP 019-16580-00050 . ance with the requirements of MSOP 019-16580-00050 .
Authorized In	dividual (typed):
Title:	
Signature:	
Date:	
	conditions or requirements for which the source is not in compliance, provide a narrative ow the source did or will achieve compliance and the date compliance was, or will be
Noncomplian	ce:

MALFUNCTION REPORT

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT OFFICE OF AIR QUALITY FAX NUMBER - 317 233-5967

This form sho	uld only be used to rep and to qualify for the			326 IAC 1-6		
THIS FACILITY MEETS THE APP PARTICULATE MATTER?, 25 TONS/YEAR VOC?, 25 ?, 25 TONS/YEAR REDUCI CARBON MONOXIDE?, 10 COMBINATION HAZARDOUS AIF ELEMENTAL LEAD?, OR I MALFUNCTIONING CONTROL E APPLICABLE LIMITATION	, 25 TONS/YEAR SULF TONS/YEAR HYDROG ED SULFUR COMPOU) TONS/YEAR ANY SIN R POLLUTANT ?, S A SOURCE LISTED L QUIPMENT OR PROCE	UR DIOXIDE ? EN SULFIDE ? NDS ?, 25 1 GLE HAZARDOU 1 TON/YEAR LEA JNDER 326 IAC 2	, 25 TONS/YEAI , 25 TONS/YEAI TONS/YEAR FLUOF S AIR POLLUTANT AD OR LEAD COMF -5.1-3(2) ? E	R NITROGEN (R TOTAL REDUCTION REPORT RIDES ?, 25 TO POUNDS MEAS MISSIONS FROM RESERVED REPORT RESERVED REPORT REPOR	OXIDES JCED S 100TON NS/YEA SURED OM	S?, ULFUR NS/YEAR AR ANY
THIS MALFUNCTION RESULTED PERMIT LIMIT OF	O IN A VIOLATION OF: 3	326 IAC	OR, PERMIT COND	DITION #	AND	/OR
THIS INCIDENT MEETS THE DE	FINITION OF 'MALFUN	CTION' AS LISTE	D ON REVERSE SI	DE? Y	N	
THIS MALFUNCTION IS OR WILL	BE LONGER THAN TH	HE ONE (1) HOUF	R REPORTING REC	QUIREMENT?	Υ	N
COMPANY:			PHONE NO.	()		
LOCATION: (CITY AND COUNTY)_ PERMIT NO	AFS PLANT ID:	AFS	POINT ID:	11	NSP.	
CONTROL/PROCESS DEVICE WH	IICH MALFUNCTIONED) AND				
REASON: DATE/TIME MALFUNCTION STAR	TFD: / / 19					AM / PM
ESTIMATED HOURS OF OPERATION	ION WITH MALFUNCTION	ON CONDITION:				
DATE/TIME CONTROL EQUIPME	ENT BACK-IN SERVICE	/ 1	9	AM/PM	l 	
TYPE OF POLLUTANTS EMITTED	: TSP, PM-10, SO2,	VOC, OTHER:		 		
ESTIMATED AMOUNT OF POLLUT	FANT EMITTED DURING	G MALFUNCTION	:			
MEASURES TAKEN TO MINIMIZE	EMISSIONS:					
REASONS WHY FACILITY CANNO	OT BE SHUTDOWN DUI	RING REPAIRS:				
CONTINUED OPERATION REQUIR	RED TO PROVIDE <u>ESS</u>	ENTIAL* SERVIC	ES:			
CONTINUED OPERATION NECES CONTINUED OPERATION NECES						
INTERIM CONTROL MEASURES:						
MALFUNCTION REPORTED BY:_ (SIGNATURE IF	FAXED)		TITLE:			
MALFUNCTION RECORDED BY:_		DATE:	TIME	·		

*SEE PAGE 2

Please note - This form should only be used to report malfunctions applicable to Rule 326 IAC 1-6 and to qualify for the exemption under 326 IAC 1-6-4.

326 IAC 1-6-1 Applicability of rule

Sec. 1. This rule applies to the owner or operator of any facility required to obtain a permit under 326 IAC 2-5.1 or 326 IAC 2-6.1.

326 IAC 1-2-39 "Malfunction" definition

Sec. 39. Any sudden, unavoidable failure of any air pollution control equipment, process, or combustion or process equipment to operate in a normal and usual manner.

*Essential services are interpreted to mean those operations, such as, the providing of electricity by power plants. Continued operation solely for the economic benefit of the owner or operator shall not be sufficient reason why a facility cannot be shutdown during a control equipment shutdown.

If this item is checked on the front, please explain rationale:	
	

Indiana Department of Environmental Management Office of Air Quality

Technical Support Document (TSD) for a Minor Source Operating Permit

Source Background and Description

Source Name: The Dallas Group of America, Inc.

Source Location: 1402 Fabricon Blvd., Jeffersonville, IN 47130

County: Clark SIC Code: 2819

Minor Source Operating Permit No.: 019-16580-00050

Permit Reviewer: SDF

Summary

The Office of Air Quality (OAQ) has reviewed an application from The Dallas Group of America, Inc. relating to the operation of their existing synthetic magnesium silicate (Magnesol) manufacturing operation.

The Dallas Group of America, Inc. is proposing to add one (1) 40 MMBtu/hr natural gas fired spray dryer and one (1) baghouse.

Adding the proposed spray dryer and baghouse will not generate an increase in production or capacity from any existing equipment at the source. Therefore, the only emissions generated by the proposed modification are the emissions from the proposed spray dryer. The source UPTE after the proposed modification is listed below.

Unit	PM (tons/yr)	PM10 (tons/yr)	SO2 (tons/yr)	NOx (tons/yr)	VOC (tons/yr)	CO (tons/yr)	Comb. HAPs (tons/yr)
Existing Source UPTE	4.71	4.71	0.08	13.46	0.74	11.31	neg.
Proposed Modification	1.33	1.33	0.11	17.52	0.96	14.71	neg.
Total	6.04	6.04	0.19	30.98	1.70	26.02	neg.

The proposed modification increases the source NOx UPTE to a level greater than the 326 IAC 2-5.5 registration high end applicable level of 25 tons per year. Therefore, the source shall be permitted under a minor source operating permit (MSOP) pursuant to 326 IAC 2-6.1.

The source after the proposed modification will consist of the following units:

- 1. One (1) 7.5 MMBtu/hr natural gas fired spray dryer, identified as Dryer 1, with particulate emissions controlled by the PC-72 baghouse, with emissions exhausted through Stack PC-72,
- 2. One (1) 15 MMBtu/hr natural gas fired spray dryer, identified as Dryer 2, with particulate emissions controlled by the PC-420 baghouse, with emissions exhausted through Stack PC-420,
- 3. One (1) 40 MMBtu/hr natural gas fired spray dryer, identified as Dryer 3, with particulate emissions controlled by one (1) baghouse, identified as PC-960, with emissions exhausted through Stack PC-960,

- 4. One (1) 0.25 MMBtu/hr natural gas fired spray dryer, identified as Pilot Dryer, with particulate emissions controlled by the PC-9 baghouse, with emissions exhausted through Stack PC-9,
- 5. One (1) spray dryer product collection system consisting of two (2) baghouses identified as PC-144 and PC-80,
- 6. Two (2) product classifiers equipped with two (2) product classifier baghouses, identified as PC-30 and PC-80.
- 7. One (1) pneumatic product conveyor system with particulate emissions controlled by two baghouses, identified as PC-16 and PC-4.
- 8. One (1) pneumatic raw material recovery and conveyor system, with emissions collected by one of three baghouses; PC-4, PC-16, or PC-144,
- 9. One (1) 4.185 MMBtu/hr natural gas fired boiler, with emissions exhausted through the boiler stack,
- 10. One (1) 3.8 MMBtu/hr natural gas fired water heater, and
- 11. One (1) general nuisance dust collection baghouse, identified as PC-19.

Existing Approvals

The source was issued registration 019-13698-00050 on January 10, 2002.

Recommendation

The staff recommends to the Commissioner that the Minor Source Operating Permit be approved. Unless otherwise stated, information used in this review was derived from the application.

Emission Calculations

(a) Unrestricted Potential To Emit (UPTE):

The proposed spray dryer system will generate process PM and PM10 emissions, combustion criteria pollutant emissions, and combustion HAP emissions.

(1) Process Emissions:

The following calculations determine the existing process emissions and the process emissions from the proposed modification.

(A) Proposed Dryer Process Emissions:

The proposed dryer will generate process PM and PM10 emissions. However, since the particulate emissions are determined based on the maximum throughput rate and there will be no change in the throughput rate, it is determined that the process PM and PM10 emissions are already accounted for.

(B) Existing Source Process Emissions:

The magnesol manufacturing emissions are generated by the production baghouses and final product bagging process. There are no emissions generated due to unloading of raw materials because all of the raw materials are in slurry form.

Upon review of the AP-42 emission factors, it was determined that there were no direct applicable emission factors available for the magnesol manufacturing operation. Thus, it is determined that emission factors for concrete batching operations could be used due to the similar properties of the raw materials used and similar handling methods. Therefore, the emission factors used are from AP-42, Chapter 11.12, Table 11.12-2.

(1) Magnesol Manufacturing Emissions:

The following calculations determine the magnesol PM and PM10 emissions based on a maximum material throughput of 3.09 tons/hr, AP-42 emission factors, and 8760 hours of operation.

Since the raw material delivery, magnesol production, and final product are delivered via enclosed ducts with baghouses collecting the final product (integral to the process), the manufacturing emissions are determined based on emissions after controls.

```
3.09 tons material/hr * Ef (0.27 \text{ lb PM/ton material}) * 8760 hours/yr * 1/2000 tons PM/lb PM = 3.65 tons PM/yr 3.65 tons PM/yr * (1 - 0.99) = 0.04 tons PM/yr
```

PM10 is determined to be equal to PM in this case.

(2) Material Deposition Emissions:

The following calculations determine the unloading PM and PM10 emissions based on a maximum material throughput of 3.09 tons/hr, AP-42 emission factors, emissions before controls, and 8760 hours of operation.

```
3.09 tons material/hr * Ef (0.27 lb PM/ton material) * 8760 hours * 1/2000 tons PM/lb PM = 3.65 tons PM/yr
```

PM10 is determined to be equal to PM in this case.

(2) Combustion Emissions:

(A) Proposed Dryer Combustion UPTE:

The following calculations determine the combustion UPTE based on natural gas combustion, a maximum capacity of 40.00 MMBtu/hr, AP-42 emission factors, emissions before controls, and 8760 hours of operation.

 $40 \; MMBtu/hr * \; 8760 \; hr/yr * \; 1 \; E6 \; Btu/MMBtu * \; 1/1000 \; cf/Btu * \; 1/1E6 \; MMcf/cf * \; Ef \; lb \; poll/MMcf * \; 1/2000 \; ton \; poll/lb \; poll = ton \; poll/lyr \; poll/lb \; poll = ton \; poll/lb \;$

	PM 7.6 lb/MMcf	PM10 7.6 lb/MMcf	SO2 0.6 lb/MMcf	NOx 100 lb/MMcf	VOC 5.5 lb/MMcf	CO 84 lb/MMcf
ton/yr	1.33	1.33	0.11	17.52	0.96	14.71

(B) Existing Source Combustion UPTE:

The following calculations determine the boiler, spray dryer, and water heater emissions based on natural gas combustion, a combined maximum capacity of 30.74 MMBtu/hr, AP-42 emission factors, emissions before controls, and 8760 hours of operation.

30.74 MMBtu/hr * 1 E6 Btu/MMBtu * 1/1000 cf/Btu * 1/1E6 MMcf/cf * Ef lb poll/MMcf = lb/hr | lb/hr * 8760 hr/yr * 1/2000 ton poll/lb poll = ton poll/yr

	PM	PM10	SO2	NOx	VOC	CO
	7.6 lb/MMcf	7.6 lb/MMcf	0.6 lb/MMcf	100 lb/MMcf	5.5 lb/MMcf	84 lb/MMcf
ton/yr	1.02	1.02	0.08	13.46	0.74	11.31

(3) HAP Emissions:

The raw materials used at the source are sodium silicate, magnesium oxide, and sulfuric acid. The raw materials are not regulated hazardous air pollutants and the production reactions do not generate any hazardous air pollutant emissions.

The combustion of natural gas will generate negligible amounts of hazardous air pollutants.

Therefore, it is determined that there are only negligible amounts of hazardous air pollutants at the source.

The source UPTE is the sum of the existing UPTE and the UPTE from the proposed modification. The following table lists the revised source UPTE.

Unit	PM (tons/yr)	PM10 (tons/yr)	SO2 (tons/yr)	NOx (tons/yr)	VOC (tons/yr)	CO (tons/yr)	Comb. HAPs (tons/yr)
Existing Source Process Emissions	3.69	3.69	-	-	-	-	-
Process Emissions Due to Modification	-	1	1	•	1	1	-
Existing Source Combustion Emissions	1.02	1.02	0.08	13.46	0.74	11.31	neg.
Combustion Emissions Due to Modification	1.33	1.33	0.11	17.52	0.96	14.71	neg.
Total	6.04	6.04	0.19	30.98	1.70	26.02	neg.

(b) Emissions After Controls:

(1) Process Emissions:

(A) Proposed Dryer Process Emissions:

As previously mentioned, the emissions due to the proposed modification are already accounted for.

(B) Existing Source Process Emissions:

(1) Magnesol Manufacturing Emissions:

The PM(PM10) emissions from the magnesol production operation are already based on emissions after controls and are determined to be 0.04 tons/yr.

(2) Material Deposition Emissions:

The raw material deposition emissions are controlled. These emissions are controlled by baghouse systems, each, with an overall control efficiency of 99%.

Thus, the PM and PM10 emissions are determined as follows:

```
Emissions After Controls (tons PM/yr) = Emissions Before Controls * (1 - 0.99) = tons PM/yr = 0.04 tons PM/yr = 0.04 tons PM/yr
```

PM10 is determined to be equal to PM in this case.

(2) Combustion Emissions:

(A) Proposed Dryer Combustion UPTE:

The combustion emissions are uncontrolled. Therefore, the emissions after controls equal the emissions before controls.

	PM	PM10	SO2	NOx	VOC	CO
	7.6 lb/MMcf	7.6 lb/MMcf	0.6 lb/MMcf	100 lb/MMcf	5.5 lb/MMcf	84 lb/MMcf
ton/yr	1.33	1.33	0.11	17.52	0.96	14.71

(B) Existing Source Combustion UPTE:

The combustion emissions are uncontrolled. Therefore, the emissions after controls equal the emissions before controls.

	PM	PM10	SO2	NOx	VOC	CO
	7.6 lb/MMcf	7.6 lb/MMcf	0.6 lb/MMcf	100 lb/MMcf	5.5 lb/MMcf	84 lb/MMcf
ton/yr	1.02	1.02	0.08	13.46	0.74	11.31

(3) HAP Emissions:

The HAP emissions are uncontrolled. Therefore, the emissions after controls equal the estimated emissions before controls.

The source emissions after controls is the sum of the existing emissions after controls and emissions after controls from the proposed modification. The following table lists the revised source emissions after controls.

Unit	PM (tons/yr)	PM10 (tons/yr)	SO2 (tons/yr)	NOx (tons/yr)	VOC (tons/yr)	CO (tons/yr)	Comb. HAPs (tons/yr)
Existing Source Process Emissions	0.08	0.08	-	-	-	-	-
Process Emissions Due to Modification	-	-	-	-	-	-	-
Existing Source Combustion Emissions	1.02	1.02	0.08	13.46	0.74	11.31	neg.
Combustion Emissions Due to Modification	1.33	1.33	0.11	17.52	0.96	14.71	neg.
Total	2.43	2.43	0.19	30.98	1.70	26.02	neg.

Potential To Emit

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as "the maximum capacity of a stationary source to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U.S. EPA."

This table reflects the source PTE after the proposed modification based on the above estimated emissions calculations. Control equipment is not considered federally enforceable until it has been required in a federally enforceable permit.

Pollutant	Potential To Emit (tons/year)
PM	6.04
PM-10	6.04
SO ₂	0.19
VOC	1.70
CO	26.02
NO _x	30.98

Note: For the purpose of determining Title V applicability for particulates, PM-10, not PM, is the regulated pollutant in consideration.

Pollutant	Potential To Emit (tons/year)				
Total Combined HAPs	neg.				

The source NOx UPTE is greater than the 326 IAC 2-5.5 registration high end applicable level of 25 tons per year. Therefore, the source shall be permitted under a minor source operating permit (MSOP) pursuant to 326 IAC 2-6.1.

County Attainment Status

The source is located in Clark County.

Pollutant	Status				
PM ₁₀	attainment or unclassifiable				
SO ₂	attainment or unclassifiable				
NO ₂	attainment or unclassifiable				
Ozone	maintenance attainment				
СО	attainment or unclassifiable				
Lead	attainment or unclassifiable				

- (a) Volatile organic compounds (VOC) are precursors for the formation of ozone. Therefore, VOC emissions are considered when evaluating the rule applicability relating to the ozone standards. Clark County has been designated as maintenance attainment for ozone. Therefore, VOC emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 and 40 CFR 52.21.
- (b) Clark County has been classified as attainment or unclassifiable for all criteria pollutants. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 and 40 CFR 52.21.
- (c) Fugitive Emissions

Since this type of operation is not one of the 28 listed source categories under 326 IAC 2-2 and since there are no applicable New Source Performance Standards that were in effect on August 7, 1980, the fugitive PM emissions are not counted toward determination of PSD and Emission Offset applicability.

Source Status

New Source PSD Definition (emissions after controls, based upon 8760 hours of operation per year at rated capacity and/or as otherwise limited):

Unit	PM (tons/yr)	PM10 (tons/yr)	SO2 (tons/yr)	NOx (tons/yr)	VOC (tons/yr)	CO (tons/yr)	Comb. HAPs (tons/yr)
New Source Emissions After Controls	2.43	2.43	0.19	30.98	1.70	26.02	neg.

PSD Major Levels	250	250	250	250	250	250	-
Part 70 Major Levels	-	100	100	100	100	100	25

- (a) The source after the proposed modification is not a major PSD stationary source because no regulated pollutant emissions are greater than their respective major source levels and the source is not one of the 28 listed source categories.
- (b) The source after the proposed modification is not a Title V major stationary source because no criteria pollutant potential to emit (PTE) exceeds the applicable level of 100 tons/yr, no single hazardous air pollutant PTE exceeds the applicable levels of 10 tons/yr, and the combined hazardous air pollutant PTE does not exceed the applicable level of 25 tons/yr.

Federal Rule Applicability

(a) New Source Performance Standards (NSPS):

There are no New Source Performance Standards (326 IAC 12 and 40 CFR Part 60) that apply to the source.

(b) National Emission Standards for Hazardous Air Pollutants (NESHAPs):

There are no National Emission Standards for Hazardous Air Pollutants (326 IAC 14 and 20 and 40 CFR Part 61 and 63) that apply to this source.

State Rule Applicability

(a) Entire State Rule Applicability:

326 IAC 1-6-2 (Malfunction Requirements):

The malfunction requirements under 326 IAC 1-6 apply because the source is being permitted under 326 IAC 2-6.1, one of the applicable permits specified in the rule.

326 IAC 1-6-3 (Preventive Maintenance Plan):

Pursuant to 326 IAC 1-6, the source is required to have a preventive maintenance plan under 326 IAC 1-6-3 because the source is being permitted under 326 IAC 2-6.1, one of the applicable approvals.

However, the Office of Air Quality has determined that if there are no compliance monitoring requirements, no preventive maintenance plan will be required either.

Thus, no preventive maintenance plan will be required.

326 IAC 2-4.1 (HAP Major Sources)

This source is not subject to the requirements of 326 IAC 2-4.1 because no single hazardous air pollutant (HAP) emissions exceed 10 tons per year, and the combined HAP emissions are less than 25 tons per year.

326 IAC 2-6 (Emission Reporting):

This source is subject to 326 IAC 2-6 (Emission Reporting), because it is located in Clark county and has NOx emissions greater than the applicable rate of 10 tons per year.

Pursuant to 326 IAC 2-6, the Permittee shall submit an annual emission statement certified pursuant to the requirements of 326 IAC 2-6, that must be received by April 15 of each year and must comply with the minimum requirements specified in 326 IAC 2-6-4. The annual emission statement shall meet the following requirements:

- (a) Indicate estimated actual emissions of criteria pollutants from the source, in compliance with 326 IAC 2-6 (Emission Reporting);
- (b) Indicate estimated actual emissions of other regulated pollutants (as defined by 326 IAC 2-7-1) from the source, for purposes of Part 70 fee assessment.

326 IAC 5-1-2 (Opacity Limitations):

The opacity requirements of 326 IAC 5 apply to the source.

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall meet the following, unless otherwise stated in this permit:

- (a) Opacity shall not exceed an average of thirty percent (30%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity) monitor in a six (6) hour period.

326 IAC 6-4 (Fugitive Dust Emissions):

The source is subject to the requirements of 326 IAC 6-4 because 326 IAC 6-4 applies to all sources that generate fugitive dust emissions.

Pursuant to 326 IAC 6-4, the Permittee shall not allow fugitive dust to escape beyond the property line or boundaries of the property, right-of-way, or easement on which the source is located, in a manner that would violate 326 IAC 6-4 (Fugitive Dust Emissions).

326 IAC 6-5 (Fugitive Dust Emissions):

326 IAC 6-5 does not apply because the source potential fugitive particulate matter emissions are less than the applicable level of 25 tons per year.

(b) Individual State Rule Applicability

326 IAC 6-1-2 (PM Limitations):

Although this source is located in Clark County, this source is not subject to 326 IAC 6-1-2 because the potential and actual PM emissions are less than the respective applicable levels of 100 and 10 tons per year.

326 IAC 6-3-2 (PM Limitations):

Pursuant to 326 IAC 6-3-2(a), the particulate matter (PM) emissions for a process weight rate of 3.09 tons/hr, is determined to be 8.73 lb/hr.

PM Emissions (tons/hr) = $4.10 * (3.09 tons/hr)^0.67 = 8.73 lb PM/hr$

The magnesol manufacturing operation has 10 baghouses. The emissions from the baghouses shall be based on one tenth of the hourly rate, or 0.87 lb PM/hr, each.

Stack Testing Requirements

Stack testing is required for the following emission units:

(a) All NSPS/NESHAP units, as required by the applicable standard.

- (b) All emission units subject to 326 IAC 6-1, as outlined in 326 IAC 6-1-4(b).
- (c) An emission unit with potential emissions greater than 40 tons per year and which must utilize a control device to achieve compliance, regardless of the country in which the facility or source is located.
- (d) An emission unit which must utilize a control device to satisfy a synthetic minor limit.
- (e) An emission unit for which an unapproved alternative emission factor was utilized in the permit calculations.
- (f) An emission unit which calculate "non-compliance" when the initial permitting review was conducted.

There are no emission units of the types listed above, Therefore, no stack testing shall be required.

Compliance Monitoring

Compliance monitoring is required for all emission unit which generate PM, SO2, or VOC emissions with existing applicable requirements and:

- (a) a NSPS or NESHAP applies,
- (b) there is a control device and the allowable emissions for the controlled pollutant exceed 10 pounds per hour,
- (c) there is no control device and the actual emissions exceed 25 tons per year, or
- (d) a condition limiting PTE is the only thing keeping the unit out of an applicable requirement.

There are no applicable NSPS or NESHAPs, there are no control devices and the actual emissions are less than the applicable level of 25 tons per year, and there are no PTE limits that keep a unit out of an applicable requirement.

Therefore, no compliance monitoring shall be required.

Conclusion

The proposed Magnesol manufacturing operation shall be constructed and operated pursuant to the conditions specified in Minor Source Operating Permit **019-16580-00050**.